(19) World Intellectual Property **Organization**

International Bureau



(43) International Publication Date 9 June 2005 (09.06.2005)

PCT

(10) International Publication Number WO 2005/051823 A1

(51) International Patent Classification7:

B65H 59/14

(21) International Application Number:

PCT/NL2004/000795

(22) International Filing Date:

11 November 2004 (11.11.2004)

(25) Filing Language:

Dutch

(26) Publication Language:

English

(30) Priority Data:

1024868

25 November 2003 (25.11.2003)

(71) Applicant (for all designated States except US): CATS BEHEER B.V. [NL/NL]; Burgemeester v.d. Heuvelstraat 14, NL-5737 BP Lieshout (NL).

- (71) Applicant and
- (72) Inventor: VAN DER HOORN, Rudolf, J., G., A. [NL/NL]; Burgemeester v.d. Heuvelstraat 14, NL-5737 BP Lieshout (NL).

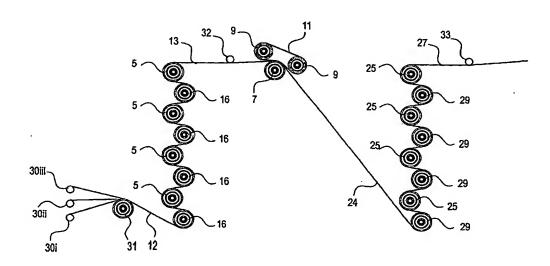
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i)) for all designations
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: METHOD AND DEVICE FOR EQUALIZING TENSION IN PARALLEL YARNS



(57) Abstract: The invention is concerned with a mode of operation and a construction to bring parallel fibres, threads or yarns (12) from different delivery points and with individual unequal exit force to the same tension each with the others. The invention consists of three processing steps: Decreasing the tension of the fibres (12) from an arbitrary individual tension level to tension level nil. Slippage-free transport of the fibres through a slip lock unit with a known velocity determined beforehand. Increasing the tension of each and every fibre from tension level nil to the required collective tension level.



WO 2005/051823 A1



Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.